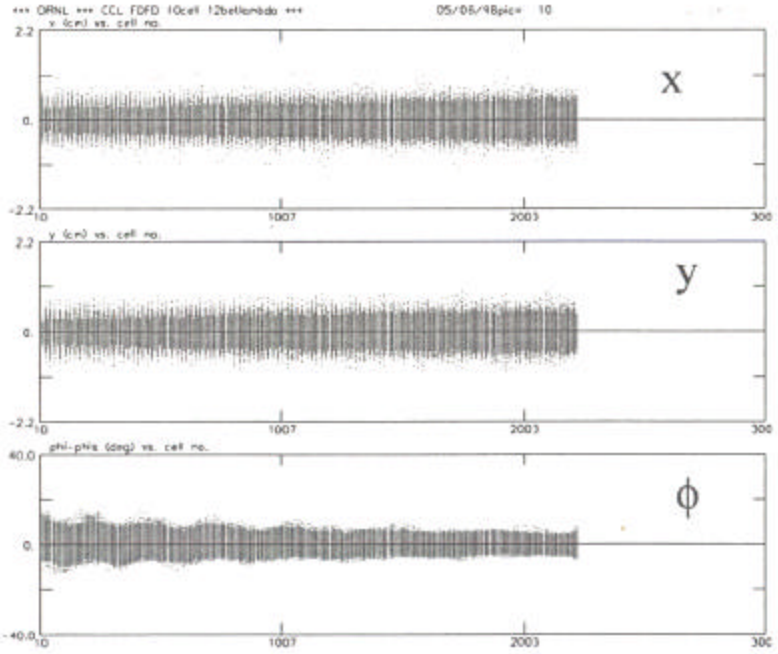
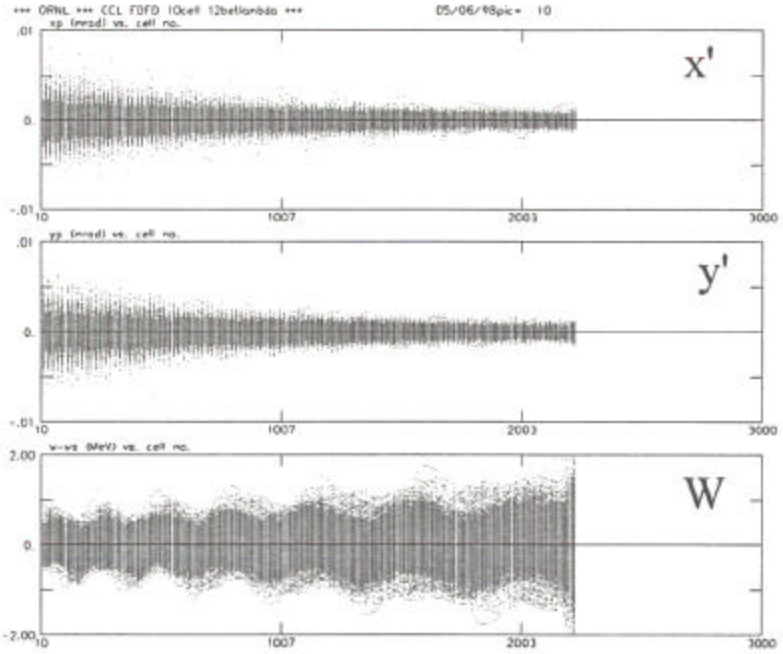
End to End Simulation Confirms Dynamics

- Beam through CCL 2, simulation from RFQ input, 4-MW case
- Full scales are 2.2 cm, 40 degrees, 10 mrad, and 2.0 MeV, respectively

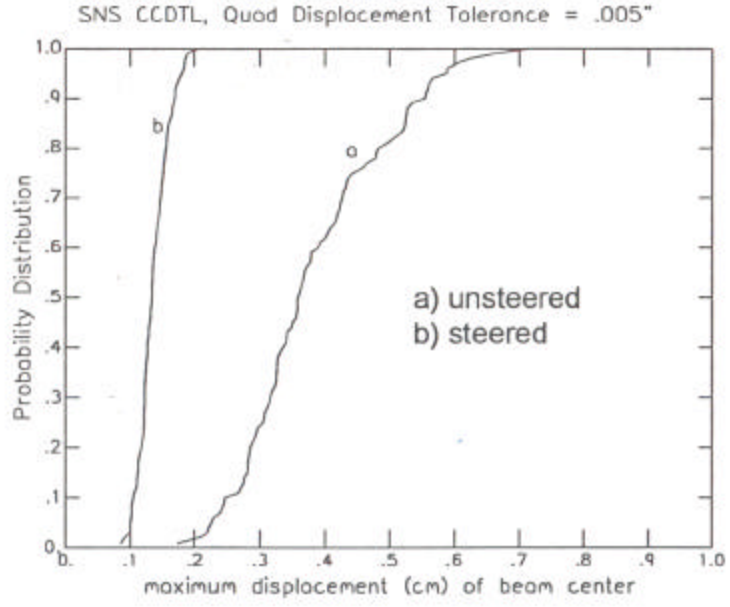


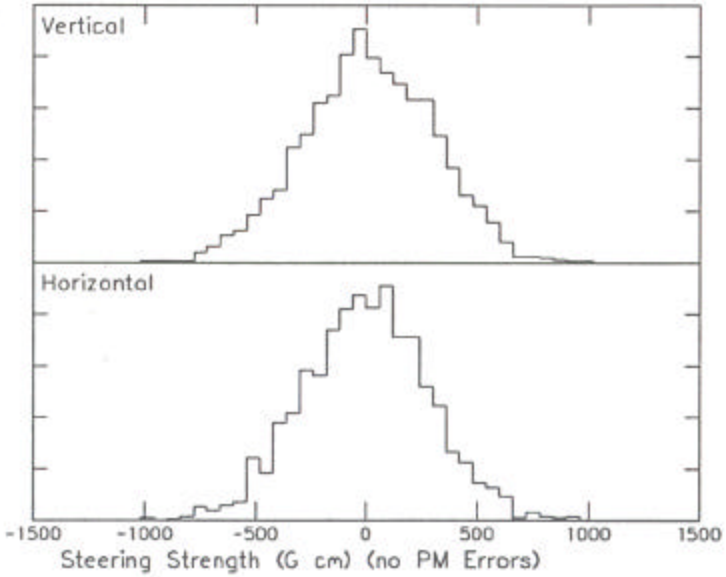


SNS-104050300-PS0003-R00

Error Studies Provide Linac Specs

- 100 run random displacement error distribution with 0.005" max offset in CCDTL
- 9 bpm/steerer pairs; 100% probability of beam remaining within 2 mm of axis; 1000 G-cm corresponds to quad motion of 0.45 mm





Expert Staff Are Available

Physics

Beam Dynamics

Tarlochan Bhatia-**X**
Harunori Takeda-**X**
George Neuschaefer-**X**
Tom Wangler-advisor*
Subrata Nath
Barbara Blind
Paul Channel
Ed Gray
Bob Jameson
Walter Lysenko
Thomas Mottershead
Filippo Neri
Robert Ryne - Codes*
Tai-Sen Wang

Structures

Jim Billen-**X**
Frank Krawczyk
Sergey Kurennoy-**X**
Brian Rusnak
Jim Stovall
Lloyd Young *
NGC
LANSCE 9
new hire
Allen Shapiro -tech
Roland Bibeau - tech

Magnets

Ted Hunter-**X**
Dave Barlow
Technician-**X**

Diagnostics

Doug Gilpatrick-**X**
John Power-**X**
Bill Selleye
New hire
Bob Shafer-**X**
2 technicians-**X**

Structures Engineering

Engineers

Dale Schrage-**X**
Rick Wood
Robert Valdiviez
Paul Leslie-**X**
Pat Kelley
Richard LeFave-**X**
New hire

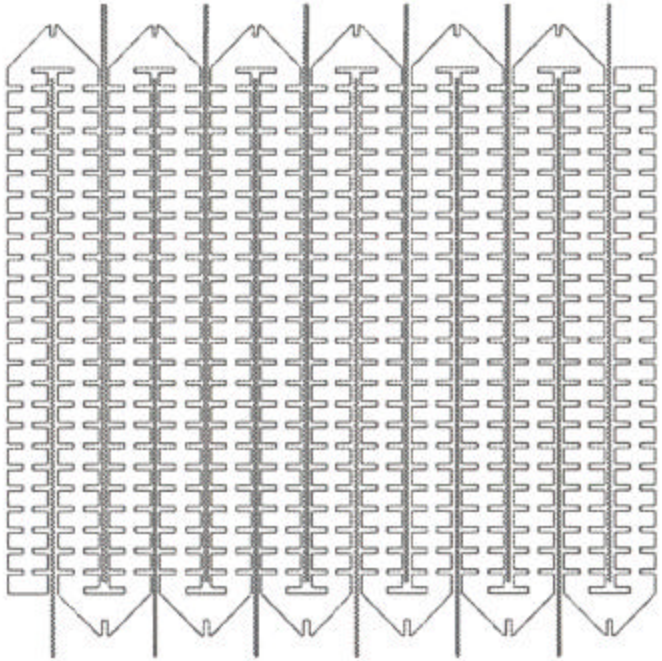
Design Techs

Phil Roybal-**X**
Floyd Sigler
Angelo Naranjo
John Ledford-**X**
2 new hires

Structures Mech Techs

Bill Clark
Felix Martinez
Armando Rendon-**X**
John Mitchell
Harvey Haagenstad
Dennis Montoya
2 contractors

Time-Dependent Chopper Simulations



Meander-line configuration with ground plane separators

- 1-ns rise time assumed for input voltage pulse